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Sci - Phys

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DSIR 34002/CI

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AEC NP 126

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Terenin, A. N.

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[1960] 16p.

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ATS-95M45R

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NLL R-6. 5828.4 F (M13330)

(Physics--Spectroscopy, TT, v. 5, no. 5)

61-12379

1. Metal halides--Spectra
2. Infrared spectra--
Analysis
3. Title: Molecular compounds
1. Fillimonov, V. N.
- II. Bystrov, D. S.
- III. Terenin, A. N.
- IV. ATS-95M45R.
- V. Associated Technical
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ATS RJ-4074

Office of Technical Services

Application of the Theory of Aberrations of High
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USIS INTERNAL USE ONLY

SLA R-4921

Obtaining Arc and Spark Spectra of Gadolinium,
Dysprosium, Erbium, and Thulium in an AC Arc, by A. I.
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II. Infrared Spectrum and Structure of Boron An-
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USIE Internal Use Only

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Centers in Alkali Metal Halide
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Ions and Their Formation Under the
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M. L. Kats.

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*Dept of Navy APL/JHU J-1213

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*ACSI I-8301
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*TIL T-5128

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The Connection Between the Real and Practical
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On the Motion of Ions and the Shape of Their
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During Their Interaction With Adsorption Centres
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V. E. Filimonov, A. E. Terenin, 8 pp.

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ATB 29428R

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DATA 60-72-67
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*PL-480

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Nagibina, I. M.

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*PL-480
OTS 63-11135
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TT-62-28585

Dianov-Klovov, V.I.
SPECTRE D'ABSORPTION DE L'OXYGÈNE LIQUIDE
DANS L'INTERVALLE DE TEMPÉRATURE 77-153° K
(12600-3300 Å) (Absorption Spectrum of Liquid
Oxygen in the 12600-3300 Å Region in the Temperature
Range 77-153°K). 20p. (foreign text included, but
illegible). 23 refs. CNRS-XXVIII 48.
Order from OTS, ETC or CNRS \$0.80 TT-62-28585

Trans. in French of Optika i Spektroskopiya (USSR)
1958, v.4, no.4, p.448-454.

DESCRIPTORS: *Oxygen, Liquefied gases, *Absorption
spectrum, Spectrophotometers, Complex compounds.

(Physics--Spectroscopy, TT, v. 11, no. 9)

- I. Dianov-Klovov, V.I.
- II. CNRS-XXVIII 48
- III. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
European Translations Centre

The Dependence of the Absorption of Infrared
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and Path Length in the Case of Singlet Lines
and Groups of Lines in the Band, by K. P.
Vasilievskiy, B. S. Kaporent, 13 pp.

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SIA 60-23517

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Microwave Spectrum and Rotational Constants, of
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Murina, A. M. Prokhorov, 2 p.

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pp 521-523.

SLA 59-20860

Sci
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Relationship Between the Scanning Speed and the
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Investigation of Powerful Pulse Discharge With
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Sci - Phys
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CSIRO Tr 4171

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(2436-D)

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On The Excitonic States of a Molecular Crystal.
Containing Different Molecules, by A. F.
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US JPRS 523-D

Sci - Physics
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(2436-D)

On the Capture of "Free Excitons by Impurities in
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US JPRS 524-D

Sci - Physics
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ATS-21M39R
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Sci

Vol 4, No 1
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Shpol'skii, E. V. and Girdzhlyauskaite, E. A.
LUMINESCENCE AND ABSORPTION OF PYRENE
AND 3,4-BENZOPYRENE IN FROZEN SOLUTIONS
OF NORMAL PARAFFINS. [1961] 24p. 11 refs.
Order from SLA \$2.60 61-20484

Trans. of Optika i Spektroskopiya (USSR) 1958, v. 4
[no. 5] p. 620-630.

DESCRIPTORS: *Hydrocarbons, Benzoyl radicals,
Solidified gases, Luminescence, Absorption,
Spectrographic analysis, Optics, Fluorescence.

The luminescence spectra and the long-wave portion of
the absorption spectra of pyrene and 3,4-benzopyrene
in solutions of normal paraffinic hydrocarbons from
n-pentane to n-decane have been studied at the temper-
ature of liquid nitrogen. It was shown that under these
conditions the spectra exhibit a linear fine structure
(Physics-Spectroscopy, TT, v. 7, no. 5) (over)

61-20484

- I. Shpol'skii, E. V.
- II. Girdzhlyauskaite, E. A.

K-H 7687-2

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The Absorption and Luminescence Spectra of Nickel-
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B. Z. Gerasimov, 10 pp.

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NLL M-2981

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The Reflection of Light by a System of Thin
Film Applied to an Opaque Metal Layer, by G. A.
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1958, pp 551-557.

NIL M. 2952

Sci - Phys

Dec 61

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Interaction Between Electrons and the Activation of
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NAL. M. 2431

Sci - Chem

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Formation of Luminescence and the Nature of
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Sci - Physics
Sep 59

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TT-62-28781

Sverdlov, L.M.

THEORIE DES INTENSITES DES RAIES DE SPECTRES INFRAROUGES DE L'ETHYLENE ET DU TETRADETERO-ETHYLENE (Teoriya Intensivnostei v Infrazhnykh Spektakh Etilena i Tetradetero-etilena) (Theory of Intensities in the Infrared Spectra of Ethylene and Tetradeteroethylene). 14p. (foreign text included) 7 refs. CNRS-VIII 110.

Order from OTS, ETC or CNRS \$1.60 TT-62-28781

Trans. in French of Optika i Spektroskopiya (USSR) 1958, v.4, no.5, p.697-701.

DESCRIPTORS: *Ethylenes, Deuterium, Infrared spectroscopy, *Spectra (Infrared), Intensity.

(Physics--Spectroscopy, TT, v. 11, no. 9)

I. Sverdlov, L.M.

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III. Centre National de la Recherche Scientifique, Paris

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Determination de la Composition Isotopique
D'Apres les Spectres D'Adsorption, (Determination
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Reverse Trans
CEA Tr R-687

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Demkov, Yu. N.; Reigauz, M. G.; Senyukov, R. V.

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Order from NTC as 70-13396-07D: HC \$ 6.70, MF \$ 5.80.

Comparative Investigations of the Meteorological
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No 1, 1958, pp 712, 713.

DBIR LNU RPS 1001
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Sol - Phys
May 59

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Determining the Degree of Heterogeneity
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By I. V. Dvornikova, I. M. Nagikina, 16 pp.
RUSSIAN, per, Optika i Spektroskopiya,
Vol IV, No 4, 1958, pp 421-429. 5697292
FTD-TT-64-1138

Sci-Elec
Jul 65

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Validov, M. A.
THE REFLECTION OF LIGHT BY A SYSTEM OF
THIN FILM APPLIED TO AN OPAQUE METAL
LAYER (Otrazhenie Sveta Sistemoi Tonkikh Plenok
Nanesennikh na Neprozrachnyi Metallicheski Sloi) tr.
by L. Meyer. [1961] [9] p. 7 refs. S. M. R. E. Trans.
no. 4375; [DSIR LLU] M. 2952.
Order from OTS or SLA \$1.10

61-23378

Trans. of Optika i Spektroskopiya (USSR) 1958, v. 4,
no. 5, p. 651-657.

DESCRIPTORS: *Mirrors, *Dielectric films, *Light,
Reflection, Thin films, Metal films

It is shown how A. G. Vlasov's mathematical theory
can be used for calculation of the reflection of light
from metal mirrors covered with layers of dielectric
material. Equations are given for the calculation of
(Physics--Optics, TT, v. 6, no. 9) (over)

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- I. Validov, M. A.
- II. SMRE Trans-4375
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- IV. Safety in Mines Re-
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Energy of the Normal State of He, by
Yu. N. Denkov, et al.

Run ~~GERMAN~~, per, Optika i Spektroskopiya,
Vol 4, No 6, 1958, pp 709-714.

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On the Measurement of Lifetimes of the Levels 3^3P
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Coincidences, by A. L. Osherovich, I. G. Savich,
7 pp.

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Sci - Nuc Phys
Apr 62

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Ostrovskiy & Penkin

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*PL 430
CT3 61-11437

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Investigation of the Instantaneous Brightness of a Filament
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Stepanov, B. I. and Prima, A. M.
 THE VIBRATIONAL SPECTRA OF SILICATES. I.
 THE COMPUTATION OF FREQUENCIES AND IN-
 TENSITIES OF THE SPECTRAL BANDS OF THE
 SILICATES. [1961] 23 p. 22 refs.
 Order from LC or SIA m\$2.70, ph\$4.80 61-10905

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New secular equations expressing the frequencies,
 forms of the normal vibration, intensities, and polari-
 zation of the vibrational lines of the crystals are de-
 rived for pyroxenes, crystals with layers of SiO_4 tetra-
 hydra, beta-quartz, and beta-cristobalite. (See also
 61-10906)

(Physics--Spectroscopy, TT, v. 5, no. 11)

1. Silicates--Spectra
2. Glass--Spectra
3. Raman spectra--Analysis
4. Infrared spectra--Analysis
- I. Stepanov, B. I.
- II. Prima, A. M.
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NLL 11-59-59

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DESCRIPTORS: *Anhydrides, *Boric acids, *Infrared
spectroscopy, Molecular structure, Valence, Polari-
zation, *Molecular spectroscopy, Molecular associ-
(Physics-Spectroscopy, TT, v. 7, no. 3) (over)

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II. Sobolev, N. N.
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Previously derived equations (Optika i Spektroskopiya
 4: 734-749, 1958; available in translation from LC or
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 late the vibrational spectra of silicate crystals and to
 interpret the Raman and IR spectra of the silicate
 glasses and several crystals. The spectra of meta-
 silicate and bi-silicate are qualitatively different. The
 spectrum of glasses of the bi-silicate composition sug-
 gest the existence in glass of the elements of layers
 composed of SiO_4 tetrahedra. The crystals with chemi-
 cal composition equivalent to that of bi-silicate possess
 the layers of SiO_4 tetrahedra.
 (Physics-Spectroscopy, TT, v. 5, no. 11)

1. Silicates--Spectra
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3. Raman spectra--Analysis
4. Infrared spectra--Analysis
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- II. Prima, A. M.
- III. Title: Interpretation...

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AND WATER. Pt. 2 of Investigation of Vibration
Spectra of Molecular Compounds of Boron Trifluoride
with Nitrogen and Oxygen-Containing Substances. [1962]
9p.
Order from ATS \$16.00 ATS-34P62R

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DESCRIPTORS: *Spectrographic analysis, *Vibration,
*Boron compounds, *Fluorides, Nitrogen, Oxygen,
Methanol, Ethanol, Water

(Physics--Spectroscopy, TT, v. 9, no. 1)

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III. Title: Investigation...
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Order from OTS or SLA \$2.60 62-18621

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no. 4, p. 440-449.

DESCRIPTORS: *Optics, Atmosphere, *Light,
Scattering, Polarization, Electromagnetic waves,
*Spectroscopy.

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